ABSTRACT

A mutlicarrier transmitting apparatus, a multicarrier receiving apparatus and a multicarrier radio communication method, which are capable of improving a throughput of a whole multicarrier radio communication system. Based on receiving SNR values of users 1 to 4 for all of the subcarriers 1 to 4 in a receiving SNR table made, the number of available users $U(n)$ of each subcarrier is calculated. Subcarriers $n*$ having the smallest number of the available users are searched, and a user $k*$ showing the highest receiving SNR value among the researched subcarriers $n*$ having the smallest number of the available users $U(n)$ is searched. Subsequently, the subcarriers $n*$ are allocated to the user $k*$.